

**CAPILLARY ELECTROKINESIS BASED CELLULAR ASSAYS****ABSTRACT OF THE DISCLOSURE**

- 5           Cell based assays are performed in a microfluidic device, where the cells are introduced into a reservoir and are contacted with one or more agents prior to or during their residence in the reservoir or in a capillary channel connected to the reservoir. The cells are moved by electrokinesis individually from the reservoir to a detector, where the status of the cells as a result of contacting said agents is determined. Conditions are
- 10       provided for moving the cells electrophoretically or by electroosmotic force, where the cells may be viable or fixed, natural or genetically modified.